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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/589,662

08/16/2006

Jordi Tormo i Blasco

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EXAMINER

KLINKEL, KORTNEY L

ART UNIT

PAPER NUMBER

4131

NOTIFICATION DATE

DELIVERY MODE

03/07/2008

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/589,662	Applicant(s) TORMO I BLASCO ET AL.	
	Examiner Kortney Klinkel	Art Unit 4131	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☒ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>9/13/2006 and 8/16/2006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claims

Receipt is acknowledged of a preliminary amendment filed on August 16, 2006 in which claims 3, 5-9 were amended and claims 11-20 were added. Claims 1-20 are pending in the instant Office action.

Information Disclosure Statement

Acknowledgement is made of applicant's submitting of two information disclosure statements, one on September 13, 2006 and one on August 16, 2006. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statements have been considered by the examiner.

Specification

The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Foreign Priority

Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Germany on February 16, 2004. It is noted, however, that applicant has not filed a certified copy of the German application number 102004007743.6 as required by 35 U.S.C. 119(b).

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 5, 10 and 12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Dependent claims 5 and 12 recite the limitation "applied simultaneously, that is jointly or separately, or in succession". Claims 5 and 12 are internally inconsistent because the parent claim, claim 1, indicates that compounds of the formula I and II are in admixture. A mixture does not allow for separate or successive application of ingredients contained therein. There is insufficient antecedent basis for this limitation in the claims.

Claim 10 provides for the use of the compounds I and II, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 10 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claim 10 provides for the use of the compounds I and II...for preparing a composition suitable for controlling harmful fungi, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claim 10 is rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under

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35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pees et al. (WO 98/46607) in view of Tsuboi et al. (US 4731385), in further view of Yabutani (US 4093743).

Applicants claim a fungicidal mixture which comprises the triazolopyrimidine derivative of formula I and flutolanil of formula II in a synergistically effective amount.

Pees et al. teach triazolopyrimidine derivatives of formula I (See page 3, lines 5-15 and Example 2 on page 20 for preferred compound of instant claim 1) to have enhanced systemic activity and enhanced systemicity and fungicitoxy against rice diseases and powdery mildews (page 7, lines 8-11), namely for the control of phytopathogenic fungi such as *Altemaria solani*, *Botrytis cinerea*, *Cercospora beticola*, *Cladosporium herbarum*, *Corticium rolfsii*, *Erysiphe graminis*, *Helminthosporium tritici repentis*, *Leptosphaeria nodorum*, *Micronectriella nivalis*, *Monilinia fructigena*, *Mycosphaerella ligulicola*, *Mycosphaerella pinodes*, *Pyricularia grisea f. sp. oryzae*, *Rhizoctonia solani* and *Sclerotinia sclerotiorum*, *Uncinula necator*, in particular for the control of *Uncinula necator* (page 7 lines 13-19), which reads on instant claims 7 and 15-16. Note particularly page 17, line 7 to page 19, line 2; especially page 17, line 19-22 states, "These mixtures of fungicides can have a broader spectrum of activity than the compound of general formula I alone. Furthermore, the other fungicide can have a synergistic effect on the fungicidal activities of the compound of general formula I." Pees discloses that flutolanil (page 18, line 3) as one of the possible other fungicides that can show a synergistic effect with the triazolopyrimidine derivative of question (instant claims 1-20).

Pees also teaches the use of the triazolopyrimidines as a fungicidal composition comprising the triazolopyrimidine derivative in the instant application and also said triazolopyrimidine in combination with a second active ingredient (page 12, lines 3-6 and 9-10 respectively) further comprising a liquid or solid carrier (page 12, lines 16-21), which reads on instant claims 3 and 11. Pees also discloses the method of using the above mentioned fungicidal mixture to treat the fungi, soil, peat, plants, seeds etc. (page 19, lines 3-12), which reads on instant claims 4, 8-9, and 17-20.

The instant invention differs from Pees in that the cited reference does not *distinctly* disclose the combination of the triazolopyrimidine with flutolanil. This deficiency is addressed through the teachings of Tsuboi et al. (US 4731385)

Tsuboi et al. teach the fungicidal properties of flutolanil, and more specifically the synergistic fungicidal effects for combating rice blast of mixtures of flutolanil with other compounds, namely insecticides based on nitromethylbenzanilide derivatives (column 2, lines 51-59 and column 15, Table 4, note that flutolanil is compound E, and column 16, Examples 15 and 16), which reads on instant claims 7, and 15-16. Table 4 and Examples 15 and 16 also disclose the desired weight ratio for the combination of the two biocides. Table 4 discloses a 1:2 ratio of nitromethylbenzanilide derivative to flutolanil, Example 15 discloses a 1:1 ratio and Example 16 provides for a 1:1.5 ratio of nitromethylbenzanilide derivative to flutolanil. All disclosed weight ratios fall within the ranges disclosed by Applicant. In the case where the claimed ranges overlap or lie inside ranges disclosed by the prior art, a *prima facie* case of obviousness exists, see MPEP 2144.05. It would be within the capability of one of ordinary skill in the art to determine the necessary concentrations of a particular fungicide or fungicidal mixture necessary to exhibit maximum synergistic fungicidal effects in controlling harmful fungi. The instant invention differs from the cited reference in that the cited references do not teach the actual amounts of each individual agent or the mixtures to be used in the method of controlling fungi. However, it would be within the capability of the ordinary skilled artisan to determine the necessary concentrations of a particular fungicide or fungicidal mixture necessary to exhibit fungicidal effects in controlling harmful fungi, and the skilled artisan would have been motivated to determine optimum amounts of each agent or a mixture to get the maximum effectiveness, this reads on instant claims 2, 6 and 13-14.

Yabutani et al. (US 4093743) is being cited because it provides further evidence that flutolanil (referred to as chemical name O-Trifluoromethylbenzoic m'-isopropoxyanilide throughout patent) is in fact "useful as a fungicide for agricultural and horticultural crops, particularly crops such as rice..." (Column 1, lines 32-36, see also Test Example 2, column 6 and Test Example 3, column 7 for experimental data for controlling rice sheath blight). Furthermore, Yabutani teach that flutolanil can be applied conjointly or in mixtures with other agricultural chemicals (column 4, lines 10-19), specifically any number of synthetic fungicide listed in column 4 lines 20-39.

It would have been *prima facie* obvious to one of ordinary skill in the art at the time of the instant invention to combine the teachings of the above references to develop the fungicidal mixtures claimed in the instant application. Pees teach that triazolopyrimidines are superior fungicides, in particular their enhanced systemicity and enhanced fungitoxicity against rice diseases and also show synergy when used in combination with other known fungicides. Likewise, Tsuboi teach that flutolanil is a known fungicide and it is also known to show a synergistic effect in combination with other biocides, even insecticides. The teachings of Yabutani disclose that flutolanil is a particularly good fungicide for rice. Both the instant triazolopyrimidine and flutolanil have been shown to be excellent fungicides especially for rice pathogen. "It is *prima facie* obvious to combine two compositions each of which is taught by the prior art to be useful for the same purpose, in order to form a third composition to be used for the very same purpose.... [T]he idea of combining them flows logically from their having been individually taught in the prior art." *In re Kerkhoven*, 626 F.2d 846, 850, 205 USPQ 1069, 1072 (CCPA 1980).

Applicant's data in the specification has been considered. Because both Pees and Tsuboi in light of Yabutani show synergistic effects with triazolopyrimidines and fenarimol respectively in combination with a large number of other known fungicides, there is a high expectation of synergy in the instant claimed combination. It could be reasonably argued that in most cases, additive or better than additive results should be expected for the combination of such fungicides to one of ordinary skill in the art. For the reason outlined above, claims 1-20 are deemed *prima facie* obvious in light of the teachings of the prior art and rejection under 35 U.S.C. § 103 is appropriate.

Conclusion

Claims 1-20 are rejected. No claim is allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kortney Klinkel, Ph.D. whose telephone number is (571)270-5239. The examiner can normally be reached on Monday-Friday 8am to 5pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Janet Andres (571)272-0867 or Cecilia Tsang (571)272-0562 can be reached at the respective numbers. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/JANET L ANDRES/
Supervisory Patent Examiner, Art Unit 4131

KLK